



OAK RIDGE INSTITUTE
FOR SCIENCE AND EDUCATION

AI RESOURCES

FOR K-12 EDUCATION

WELCOME

to the ORISE AI Resource Book for K-12 Educators

This guide is designed to help teachers and students get the most out of artificial intelligence tools in the classroom. Whether you're looking to create a worksheet, write a lesson plan, simplify text, or brainstorm ideas, you'll find tools and ready-to-use prompts that make it easy to get started.

How to Navigate This Document

There are two main ways to explore this resource:

1. **By Task:** If you know what you want to create (a lesson plan, image, slide deck, newsletter, etc.), start with the Resource List. Just click on the task you're working on, and you'll be taken to a page with:
 - The best AI tools for that specific task
 - Example prompts for teachers and students
2. **By AI Tool:** If you already know the tool you want to use (Canva, MagicSchool, or Gemini), use the Tool Index. Clicking on a tool name will take you to a page with:
 - What the tool can do
 - Its strengths/limitations
 - Tool link

Note on Digital Citizenship

While these tools can be helpful and timesaving, it's important to remember responsible AI use. This includes:

- Never put personal information into an AI system
- Give credit if AI is used to help with assignments
- Double-check facts and images to avoid spreading misinformation
- Use AI to support learning, not to replace critical thinking
- Encourage curiosity and caution at the same time

Pro Tip

Before fully diving into a new tool, try it out using one of the example prompts on each resource page. These are designed to give you a feel for what the tool can do and how to get a strong result with minimal effort.

A Note About AI-Generated Text

Some of the content in this guide was written with help from AI tools.

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Descript



Diffit



Doctrina



Gemini (Google)



Grammarly



Goblin



Ideamap



Invideo AI



Khanmigo
(Khan Academy)



MagicSchool.ai



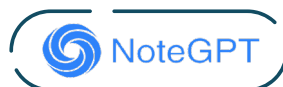
Mendeley



Mirrortalk by Swival



Natural Readers



NoteGPT



Notebook LM



Notion



Otter.ai



Wayground



SlideSpeak



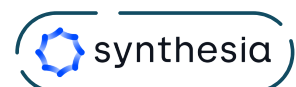
SlidesAI



SlidesGo



Sora



Synthesia



Syntea



Teachable Machine



Tutor.ai

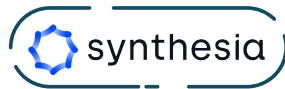
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VIDEO CREATION

VIDEO CREATION



AI Tools:



Example Prompts:

Educational Explainer Video

TEACHER: “Create a clear and engaging 3-minute explainer video for 5th graders about [insert lesson topic, e.g., photosynthesis]. Include simple definitions, real-world examples, and visually distinct sections. Use friendly narration and add text highlights for key terms.”

STUDENT: “Make a concise 1-minute video explaining [insert science concept, e.g., the water cycle]. Use simple language, include labeled diagrams, and add a summary slide at the end.”

Social Media Clip

TEACHER: “Produce a 30-second promotional video announcing our school’s [insert event, e.g., science fair]. Use bright visuals, upbeat background music, and on-screen text with event details and a call to action.”

STUDENT: “Create a fun and eye-catching 20-second video inviting classmates to join the [insert club or activity]. Include animated text, vibrant colors, and background music.”

Step-by-Step Demonstration

TEACHER: “Make a detailed 1-minute video demonstrating how to conduct the experiment [insert experiment name and procedure]. Break the procedure into clear steps with close-up shots of materials, safety tips, and voiceover instructions.”

STUDENT: “Create a step-by-step video showing how to plant and care for a seedling over time. Include captions explaining each step and show progress with time-lapse or photos.”

Animated Slideshow

TEACHER: “Design a 1-minute animated slideshow introducing key vocabulary for [insert subject/topic/vocab words]. Use clear images or icons, concise text definitions, and smooth transitions to keep students engaged.”

STUDENT: “Create a 30-second slideshow video about [insert topic, e.g., the solar system]. Include labeled images for each planet and a brief fact for each slide. Use this script [insert script].”

Transcription

With some AI tools, you can upload your video, and it will auto-transcribe it. If needed, example prompts include:

TEACHER: “Transcribe my 5-minute recorded lecture on [insert topic] and add accurate captions to the video. Format the captions for readability and sync them precisely with the audio.”

STUDENT: “Add clear, readable captions to my video presentation about [insert topic]. Ensure captions match the speech and appear in sync with the narration.”

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IMAGE CREATION

IMAGE CREATION



AI Tools:



Note: There are many different AI image generator apps on websites like MagicSchoolAI or Canva.

Example Prompts:

Diagrams

TEACHER: “Create a scientifically accurate and clearly labeled diagram showing the parts of a plant cell. Include major components such as the nucleus, mitochondria, and cell wall. Use distinct, simple colors and clean lines. Avoid artistic embellishments or speculative details. Labels should be concise and match [insert vocab list].”

STUDENT: “Draw a simple, labeled diagram of the water cycle. Include stages like evaporation, condensation, precipitation, and collection. Use arrows to show the flow clearly and keep the labels short and factual. Avoid adding anything not supported by scientific consensus.”

Infographics

TEACHER: “Design a clear infographic explaining the steps of the scientific method. Include numbered steps with brief, accurate descriptions and corresponding icons or symbols. Use a consistent color palette for clarity. The content should reflect [insert lesson plan or vocabulary list] and avoid exaggeration or speculative information.”

STUDENT: “Create an infographic that summarizes the causes and effects of pollution based on reliable sources. Use simple text, icons, and data points consistent with [insert fact list]. Ensure all information is factual and avoid any misleading visuals.”

Scene Illustrations

TEACHER: “Produce a realistic but accessible illustration of a [insert ecosystem, e.g., temperate forest]. Include accurate representations of typical plants and animals, properly placed in the environment. Label key species clearly using [insert vocabulary list]. Avoid fantasy or exaggerated elements and ensure proportions are scientifically reasonable.”

STUDENT: “Create an image of this book character. Here is the description [insert description of character]. Make sure the character reflects real-life appearances and avoid any unrealistic or fantastical features.”

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LESSON PLAN WRITING

LESSON PLAN WRITING



AI Tools:



Example Prompts for Teachers:

Starting from a Standard

“I need a 5th grade science lesson aligned to NGSS 5-PS1-4. Students should be able to observe evidence of a chemical reaction. Use the 5E model and include a hands-on investigation using safe, everyday materials. Add a written reflection for the evaluate phase.”

Revising an Old Plan

“I have a high school engineering project where students build bridges, but it’s outdated and lacks a design thinking focus. Can you help me revise it to include iterative testing, peer feedback, and connections to real-world structural design? Include NGSS alignment and differentiation.”

Adapting for Formal Submission

“I’m adapting a lesson on ramps and rolling objects for submission to my district STEM portfolio. Can you write it in a formal format (TEAMS or 5E), align it to NGSS 3-PS2-2, and include measurable objectives, a materials list, and an assessment rubric?”

Expanding an Idea

“I want to create a lesson where students design an imaginary animal adapted to a specific environment. I already have the art part planned, but I need help turning this into a full STEM lesson with a science talk, structured observation, and simple vocabulary. Use the 5E format.”

Working with Constraints

“I need a one-day lesson on Newton’s Third Law that doesn’t require lab equipment. Can you write a 5E lesson using household or classroom items for a demonstration, plus a no-tech formative assessment like an exit question or illustrated explanation?”

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CREATING SLIDES

CREATING SLIDES



AI Tools:



Tip: If you just need content to put on your slides, you can use any chat bot, like ChatGPT, Claude, CoPilot, or Gemini.

Example Prompts:

Designing a Presentation

TEACHER: “Create a slide deck for a [insert grade level] lesson on [insert topic]. Each slide should have a clear title, concise bullet points based strictly on [insert lesson plan or curriculum content], and relevant visuals such as charts or simple diagrams. Avoid speculative or unverified information. Use a consistent, easy-to-read design.”

STUDENT: “Make a slide presentation about [insert topic] using simple language. Include pictures or icons that match the descriptions in my [insert project or notes]. Don’t add anything not in my material.”

Designing a Visual Summary

TEACHER: “Design a slide summarizing key vocabulary and concepts from [insert lesson or topic]. Use bullet points pulled directly from [insert vocabulary list or text], and include clear visuals such as labeled diagrams or infographics that match the text exactly.”

STUDENT: “Make a slide that shows the most important ideas and words from my [insert science project or reading]. Use pictures that help explain those words, based only on my notes.”

Adding Speaker Notes

TEACHER: “Add detailed speaker notes to my slides on [insert topic] using the [insert lesson plan or background materials]. Include explanations, suggested questions to ask students, and activity ideas that align with the slide content.”

STUDENT: “Write speaker notes for my slide presentation about [insert topic]. Use the information from my [insert notes or textbook] and include simple explanations and interesting facts I can say while presenting.”

Adapting Slides for Different Audiences

TEACHER: “Rewrite my slide deck on [insert topic] to suit [insert audience, e.g., younger students or English language learners]. Simplify the language using terms from [insert vocabulary list], add more visuals that directly represent the content, and keep the layout clear and uncluttered.”

STUDENT: “Make my slides easier to understand for my classmates who are learning about [insert topic] for the first time. Use simple words and pictures that match my notes exactly.”

Creating Interactive Slides

TEACHER: “Create slides with interactive elements like multiple-choice questions, polls, or discussion prompts about [insert topic]. Use content from [insert lesson plan or curriculum] only and include clear instructions on how students should participate.”

STUDENT: “Make slides with questions and activities that my classmates can do during my presentation on [insert topic]. Base the questions on my notes and keep instructions simple.”

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WRITING NEWSLETTERS

WRITING NEWSLETTERS



AI Tools:



Example Prompts for Teachers:

Full Classroom Newsletter (Multi-Section)

“Write a full classroom newsletter for my 4th grade science class. We’re learning about weather patterns. Include sections for: what we’re studying, how parents can support learning at home, key vocabulary, and a spotlight on student projects.”

Newsletter Paragraph/Blurb (For Larger School Newsletter)

“Write a one-paragraph classroom update for a school newsletter. I teach high school chemistry, and my students just completed a lab on endothermic and exothermic reactions. Highlight what they learned and how they applied the concept.”

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TEXT REWRITING

TEXT REWRITING



AI Tools:



Example Prompts:

Leveling (Adjusting Text for Reading Level)

TEACHER: “Simplify this article on quantum computing so it’s appropriate for a 6th grade STEM class. Keep the main ideas but replace complex vocabulary and use shorter sentences. [copy and paste article or insert link]”

STUDENT: “Can you change this article so it’s easier for someone in 5th grade to read? Keep all the important facts. Text: [insert article]”

Email (Professional or Family Communication)

TEACHER: “Rewrite this parent email in a friendly tone. I’m inviting them to a 4th grade showcase where students will present their earthquake-resistant building designs. Include the date, time, and a note about how proud we are of their creativity.”

STUDENT: “Make this sound like a polite email to my teacher about [insert issue—missing assignment, needing help, etc.]. Text: [insert rough version]”

Rewriting for Different Purposes

TEACHER: “Rewrite this handout on how solar panels work to be clearer for my 8th grade STEM class. Make sure to include labeled sections for key parts of a solar panel, how energy is collected and transferred, and how efficiency is measured. [insert handout]”

STUDENT: “Help me change this report into something persuasive. I want to convince people to care about [insert topic]. Don’t add new ideas. Text: [insert report]”

Thank You Card or Letter (Student/Family/Community Appreciation)

TEACHER: “Write a thank you letter to a local engineer who volunteered in my 5th grade class during our roller coaster physics unit. Mention how excited the students were and highlight one example of how their input made a difference.”

STUDENT: “Rewrite this so it sounds like a kind thank you card from me to someone who helped with [insert topic]. Keep it short and friendly. Text: [insert rough draft]”

Summary (Condense a Longer Text or Resource)

TEACHER: “Summarize this article on CRISPR gene editing in under 150 words for my high school biology class. Focus on how CRISPR works, why it matters, and one ethical concern. [insert article]”

STUDENT: “Can you help me summarize this article about [insert topic] into 3–5 sentences? I need it to include the main idea and the most important details but not repeat everything. Here’s the article: [insert article or passage]”

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LETTERS OF RECOMMENDATION

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AI Tools:



Privacy note: Remember never to put a student's personal information into an AI system.

Example Prompts for Teachers:

Academic Letter for a Student (General or Class-Based)

“Write a letter of recommendation for a 9th grade student applying to a summer biomedical research camp. The student excelled in my biology class during our unit on genetics and always took initiative in our CRISPR simulations.”

Letter for a Teacher Peer or Colleague (STEM Role or Award)

“Write a letter of recommendation for my colleague, a 5th grade STEM teacher, who is applying for a grant to expand her classroom makerspace. She’s created outstanding hands-on projects including circuits, wind-powered cars, and 3D-printed designs.”

Letter for a Student with Unique Strengths or Circumstances

“Write a thoughtful letter of recommendation for a 7th grade student who struggles with test-taking but thrives in hands-on STEM projects. During our unit on environmental design, she prototyped a water filtration system that outperformed every group.”

Letter for STEM Internship, Summer Program, or Career Exploration

“Generate a professional letter recommending my 11th grade student for a NASA high school internship. He was a leader in our aerospace unit and independently researched orbital mechanics for his final project.”

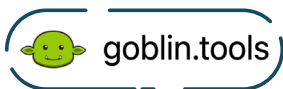
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FEEDBACK

FEEDBACK



AI Tools:



Example Prompts:

Written Feedback on Student Work

TEACHER: “Review this 6th grade science paragraph for clarity, accuracy, and organization. Provide kind, specific, and helpful feedback in 2–3 sentences that encourages revision without rewriting it for the student. Text: [insert student work]”

STUDENT: “I want to know how to improve this paragraph I wrote for [insert subject]. Give me 2–3 helpful tips that explain what I did well and what to fix. Text: [insert writing]”

Feedback on a Project or Presentation

TEACHER: “Give clear, supportive feedback on a student’s science fair presentation. Focus on how well they communicated their experiment and results and offer one suggestion for improving their next project. Description: [insert summary or transcript]”

STUDENT: “Can you give me feedback on my science project? I want to know if I explained my experiment clearly and how I can do better next time. Here’s what I said/did: [insert summary or script]”

Peer Feedback Practice

TEACHER: “Model what kind, useful peer feedback should sound like for this writing sample. Highlight one strength and one suggestion in student-friendly language. Text: [insert sample]”

STUDENT: “I’m giving feedback to a classmate. Can you help me write something that points out one thing they did well and one thing they can improve, without sounding mean? Their work is about [insert topic].”

Self-Reflection Support

TEACHER: “Generate 3 self-reflection questions for a middle school student who just completed a lab report on [insert topic]. Focus on effort, accuracy, and understanding.”

STUDENT: “I finished my [insert assignment], and I want to check how I did. Give me a few questions to help me think about what I learned and what I could do better.”

Video-Based Feedback

TEACHER: “Analyze this student’s recorded oral presentation and generate feedback on confidence, clarity, and pace. Give comments in bullet points that are supportive and specific. Link to video/transcript: [insert description or file].”

STUDENT: “I recorded myself explaining [insert topic]. Can you tell me how clear I sounded and if I looked confident? [insert video]”

Grammar and Spelling Feedback

TEACHER: “Review this student paragraph for grammar and spelling only. Make small suggestions for correction without changing the student’s voice or ideas. Text: [insert paragraph]”

STUDENT: “Can you check this paragraph and fix any grammar or spelling mistakes, but don’t rewrite the whole thing? I still want it to sound like me. Text: [insert writing]”

Rubric-Based Feedback

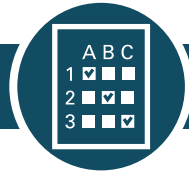
TEACHER: “Use this rubric to give feedback on a student’s argumentative essay. Focus on one strength and one area for improvement under each category: evidence, organization, and writing style. Rubric: [insert rubric]. Text: [insert essay]”

STUDENT: “I want feedback based on this rubric. It has categories for ideas, structure, and grammar. Tell me how I did in each one and give one suggestion for improvement. Rubric: [insert rubric]. Text: [insert writing]”

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RUBRIC WRITING

RUBRIC WRITING



AI Tools:



Example Prompts for Teachers:

From Scratch

“Create a 4-point rubric for a 7th grade science class presenting on animal adaptations in extreme environments. Include categories for content accuracy, use of visuals, speaking skills, and teamwork.”

Providing Materials

“[insert student worksheet] Make a rubric for this 6th grade STEM project where students code a basic animation using a block-based programming language. Assess functionality, creativity, use of code blocks, and debugging.”

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QUESTION GENERATOR

QUESTION GENERATOR



AI Tools:



Example Prompts for Teachers:

Multiple-Choice Questions

“Generate 5 multiple-choice questions for a 5th grade science quiz on the states of matter and phase changes. Include an answer key and explain each correct answer in simple terms.”

Open-Ended Questions

“Write 3 open-ended test questions for a high school physics unit on projectile motion. Questions should require students to explain their reasoning and apply formulas to new scenarios.”

Diagram-Based Questions

“Create a test question for an 8th grade life science class that includes an unlabeled diagram of the human digestive system. Ask students to label parts and explain the function of two organs.”

Calculation Problems

“Write four word problems for a 6th grade STEM class practicing how to calculate speed using the formula, $\text{speed} = \text{distance} \div \text{time}$. Include one problem with a chart and one with a real-world example.”

Scenario-Based Questions (Real-World STEM Application)

“Develop 2 scenario-based short-answer questions for a 4th grade STEM class learning about simple circuits. Include a situation where a flashlight stops working and ask students to identify possible causes and suggest solutions.”

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ACCOMMODATIONS

ACCOMMODATIONS



AI Tools:



Example Prompts for Teachers:

Modified Assignment Instructions

“Modify my 7th grade assignment on Newton’s three laws of motion for a student with an IEP who struggles with multi-step directions. Break the task into small, clear steps and reduce the reading level without changing the content. [Copy and paste assignment]”

Language Support for ELLs

“Suggest accommodations for a 5th grade ELL student during a unit on erosion and weathering. They are new to English and speak Vietnamese. Include vocabulary supports, visuals, and low-tech options.”

Executive Function Support

“Give me strategies and scaffolds to support a high school student with ADHD during a robotics coding challenge. Include planning tools, time management cues, and ways to reduce distractions.”

Visual or Sensory Supports

“Design sensory-friendly lab accommodations for a 3rd grade lesson on light and shadows for a student with sensory processing disorder. Avoid bright lights and loud sounds and provide visual cues.”

Alternate Assessment Options

“Create alternative assessment options for 6th grade students with a reading disability in a unit on chemical changes. They struggle with written tests. What are three other ways they could demonstrate mastery?”

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WORKSHEETS

WORKSHEETS



AI Tools:



Example Prompts:

Printable Practice Worksheet

TEACHER: “Create a printable worksheet with 10 practice problems aligned to [insert standard or topic or notes], including an answer key. The worksheet should be at a [insert grade level] reading level and be easy to print in black and white.”

STUDENT: “I want a worksheet to help me practice [insert topic]. Can you make 10 questions and give me the answers to check myself?”

Vocabulary Worksheets

TEACHER: “Make a vocabulary worksheet using the following list: [insert vocab list]. Include a matching section, a sentence-writing section, and a short quiz with answer key. The target grade level is [insert level].”

STUDENT: “Help me study these words: [insert vocab list]. Can you make a worksheet where I match words to definitions and write sentences?”

Graphic Organizer Templates

TEACHER: “Create a simple graphic organizer for a cause-and-effect science lesson. It should be easy for 5th graders to use, include space to draw, and be printable.”

STUDENT: “Using my notes, I need a chart to help me organize causes and effects for [insert topic]. Can you make something simple I can write and draw on?”

Fill-in-the-Blank Review Sheet

TEACHER: “Create a fill-in-the-blank worksheet to review key terms and ideas from my [insert topic] unit. Include 15 blanks and a word bank. Make sure it works for [insert grade level] students.”

STUDENT: “Make me a review sheet with blanks to fill in about [insert topic]. I want to test myself on the main words and ideas.”

Differentiated Worksheets

TEACHER: “Create two versions of a worksheet on [insert topic]—one at a standard 7th-grade reading level and one with simplified vocabulary and fewer questions for students needing support. Include answer keys for both.”

STUDENT: “[Copy worksheet] I need a version of this worksheet that’s a little easier to read and has fewer questions. Can you help? The topic is [insert topic].”

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RESEARCH



AI Tools:



Example Prompts:

Finding Relevant Research Papers

TEACHER: “I need current, peer-reviewed research papers about [insert topic], suitable for middle school students. Summarize the main findings and provide full citations in APA format.”

STUDENT: “Can you help me find easy-to-understand research articles about [insert topic]? Please give me a summary of each one.”

Summarizing Scientific Articles

TEACHER: “Summarize this scientific article for a high school audience, highlighting key points, methodology, and conclusions. Text: [insert article text or link].”

STUDENT: “Help me understand this science article. Summarize it in simple language and explain the most important parts. Text: [insert article].”

Gathering Background Information for a Project

TEACHER: “Provide a detailed overview of [insert topic] with historical context, recent developments, and key terms. Include links or references to trusted sources for students to explore.”

STUDENT: “I’m doing a project on [insert topic]. Can you give me a clear explanation of what it is and why it’s important?”

Creating Annotated Bibliographies

TEACHER: “[Insert link to sources] Create an annotated bibliography for these five sources related to [insert topic]. Include a summary and evaluation of each source’s credibility and usefulness for middle school research.”

STUDENT: “Can you help me make a list of my sources with a short note about what each one is about and why it’s good for my project? [Paste link to sources.]”

Fact-Checking Information

TEACHER: “Verify the accuracy of the following statement about [insert fact or claim]. Provide sources that support or contradict it.”

STUDENT: “Is this true? [insert statement]. Can you check and tell me what the real facts are? Show me your sources.”

Generating Research Questions

TEACHER: “Help me create 5 open-ended research questions on the topic [insert topic] that encourage critical thinking and investigation for high school students.”

STUDENT: “I need some good questions to guide my research on [insert topic]. Can you give me a few to get started?”

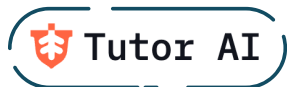
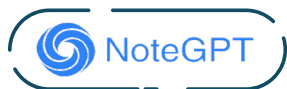
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STUDY RESOURCES

STUDY RESOURCES



AI Tools:



Example Prompts:

Creating Flashcards

“Using my notes, create a set of 20 flashcards for me on the topic [insert topic]. Each card should have a vocabulary word on one side and a clear, simple definition or explanation on the other. Please keep the language easy to understand for a [insert grade level] student. [Insert notes]”

Making Study Guides

“Can you make a detailed study guide for [insert topic, video link, slides, or notes]? Include important concepts, key dates or formulas, and examples. Organize it with headings and bullet points so it's easy for me to review before a test or quiz.”

Generating Practice Quizzes

“Using this content [insert material needing to study], make a 15-question multiple-choice quiz for me. Include four answer choices per question and provide an answer key with brief explanations for each correct answer.”

Summarizing Notes

“Summarize the main points from these notes about [insert topic]. Write the summary clearly and simply so it's easy for a [insert grade level] student to understand and review quickly.”

Creating Mind Maps or Concept Maps

“Help me create a mind map showing the main ideas and how they connect for [insert topic]. Include definitions of key terms and examples for each concept to help me understand the relationships.”

Time Management and Study Plans

“I have a test coming up next week on [insert subject]. Can you create a daily study schedule for me that breaks down what I should study each day, including suggested times for breaks and review sessions? Here is everything I need to know [insert notes].”

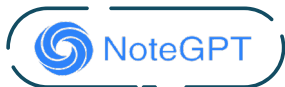
The background is a dark blue field filled with a complex network of thin, glowing green lines that intersect to form a web-like pattern. Scattered throughout this network are numerous small, bright gold dots, some of which are slightly larger and more prominent than others. The overall effect is one of a digital or cosmic network, possibly representing data connections or a star map.

NOTETAKING

NOTETAKING



AI Tools:



Example Prompts:

Taking Notes from a Lecture or Video

“Take detailed notes for me from this lecture/video on [insert content]. Include key ideas, important facts, and any examples mentioned. Organize the notes clearly with headings and bullet points for easy review. [Insert link to lecture/video]”

Summarizing Reading Material into Notes

“Summarize the main points from this reading about [insert topic] into organized notes. Use simple language and group related ideas together to help me understand and remember the information.”

Creating Outline Notes for a Topic

“Help me create an outline of notes for [insert topic]. Include main headings, subheadings, and important details. Format it so I can use it to study or prepare for a test.”

Converting Audio to Text Notes

“I have an audio recording on [insert topic]. Can you transcribe it into clear, easy-to-read notes that highlight the main ideas and any key details? [Insert link to audio]”

The background is a complex, abstract composition. It features a dense network of thin, intersecting lines in shades of green and orange. Scattered throughout this network are numerous small, glowing dots of the same colors. The overall effect is reminiscent of a digital network, a star map, or a microscopic view of a complex material. The lines and dots are more concentrated in the center and fade slightly towards the edges.

CODING



AI Tools:



Example Prompts:

Writing Code for a Simple Project

"I want to write a [insert programming language, e.g., Python] program that [describe what it should do, e.g., calculates the area of a rectangle]. Please provide clear, commented code that I can run and understand."

Debugging Code

"Here is my code that [describe what it should do]. It's not working correctly. Can you help me find and fix the errors? Code: [insert code]. Please explain what was wrong and how you fixed it."

Explaining Coding Concepts

"Explain the concept of [insert concept, e.g., loops, variables, functions] in simple terms for a [insert grade level] student. Include an example to help me understand."

Creating Coding Challenges

"Give me 5 coding challenges suitable for a beginner in [insert language]. Each challenge should have a clear goal and a short description."

Writing Comments for Code

"Help me write comments for this code so it's easier to understand. Code: [insert code]. Please explain each part clearly."

Converting Code from One Language to Another

"Can you convert this [insert language] code into [insert other language]? Code: [insert code]. Make sure the logic stays the same and explain any changes."

AI TOOLS



Adobe Firefly

Website: <https://firefly.adobe.com/>

Type: Design Tool

Linked Resources: Images, short videos, audio

Notes: High-quality visuals. Gives you multiple image outputs so you can pick your favorite. Has built in prompt guide for the type of image you want. Available within MagicSchool and Canva as well.



Anara

Website: <https://anara.com/>

Type: Research Assistant

Linked Resources: Research

Notes: Organizes and cites research papers; trains chatbot AI on your sources. Highly recommend for research use. Has daily limit with free version.



AutoDraw

Website: <https://www.autodraw.com/>

Type: Drawing tool

Linked Resources: Images

Notes: Allows students to draw and then enhances the drawings with AI. Great for students wanting to generate their own clip art.



Brisk

Website: <https://www.briskteaching.com/>

Type: Multi-tool website

Linked Resources: Lesson plans, newsletters, rec letters, text rewriting, feedback, rubrics

Notes: Popular among educators. Chrome extension that speeds up editing and content creation. Simplifies planning workflows. Favored for feedback and rubrics.



Canva

Website: <https://www.canva.com/ai>

Type: Design Tool

Linked Resources: Videos, images, slides, coding

Notes: Drag-and-drop creation with built-in AI features. Great for making visuals, student presentations, and custom resources. AI is in early stage of development and design outputs will need revisions.



ChatGPT

Website: <https://chatgpt.com>

Type: Chatbot (Text-Based)

Linked Resources: Images (limited), lesson plans, recommendation letters, text rewriting, feedback, rubrics, newsletters

Notes: Very flexible for both student and teacher use. Best when given specific, structured prompts. Has many users, so it is trained on a large database. Has daily limit of free pro features.



Claude

Website: <https://claude.ai>

Type: Chatbot (Text-Based)

Linked Resources: Rubrics, coding

Notes: Great at writing clean, readable code. Also reliable for structured text tasks. Cannot generate images.



Copilot (Microsoft)

Website: <https://copilot.microsoft.com>

Type: Chatbot (Text-Based)

Linked Resources: Images, lesson plans, newsletters, recommendation letters, text rewriting, feedback, rubrics

Notes: Best AI chatbot at free image generating and text-based results. Paid version (sometimes offered by school districts) integrates into Microsoft apps. Highly recommended for Microsoft users.



Craiyon

Website: <https://www.craiyon.com>

Type: Design Tool

Linked Resources: Images

Notes: Basic image generator. Requires very detailed prompts for accurate results. Best if you need basic images. Not recommended for scientifically accurate images.



CuriPod

Website: <https://curipod.com>

Type: Lesson Generator

Linked Resources: Lesson plans

Notes: Walks you step-by-step through creating lessons with a prompt. Uses PowerPoint format for lesson plan. Limited personalization.



DeepAI

Website: <https://deepai.org>

Type: Chatbot (Text-Based)

Linked Resources: Images, text rewriting, recommendation letters, lesson plans, rec letters, text rewriting, feedback, rubrics

Notes: Free access with no account needed. Offers image and text tools. Has a creative song generator built in.



Descript

Website: <https://www.descript.com>

Type: Media Creator

Linked Resources: Video

Notes: Ideal for teachers making class podcasts or video lessons. Includes transcription, dubbing, and editing tools. Recommended resource.



Diffit

Website: <https://app.diffit.me>

Type: Multi-tool

Linked Resources: Worksheets, slides, vocabulary list

Notes: Automatically generates differentiated materials by topic. Includes translations. Common resources used by educators. Recommend if needing a quick worksheet.



Doctrina

Website: <https://www.doctrina.ai>

Type: Study Tool

Linked Resources: Study tools (quizzes, notes, essays)

Notes: Students can generate test prep, essays, flashcards. Helpful for homework support.



Gemini (Google)

Website: <https://gemini.google.com>

Type: Chatbot (Text-Based)

Linked Resources: Lesson plans, newsletters, recommendation letters, text rewriting, feedback, rubrics

Notes: Great at information synthesis and research tasks. Integrated with other Google tools.



Grammarly

Website: <https://www.grammarly.com>

Type: Accommodations

Linked Resources: Grammar and spelling

Notes: Polishes student and teacher writing. Grammar, tone, fluency support, continues a thought, identifies AI text and plagiarism. Popular tool among students.



Goblin

Website: <https://goblin.tools>

Type: Chatbot

Linked Resources: Feedback, text writing

Notes: Provides suggested prompts to help get desired output. Created for teachers and students.



Ideamap

Website: <https://ideamap.ai>

Type: Idea Generator

Linked Resources: Brainstorming

Notes: Creates visual idea webs. Useful for planning stories, essays, or projects. Might be confusing at first use.



Invideo AI

Website: <https://invideo.io>

Type: Media Creator

Linked Resources: Video

Notes: Generates video from prompts. Allows manual editing of clips, text, and transitions. Ideal resource for video only.



Khanmigo
(Khan Academy)

Website: <https://www.khanmigo.ai>

Type: Multi-tool

Linked Resources: Lesson plans, newsletters, question generators, rubrics

Notes: Trained on Khan Academy content. Very strong instructional support. Doesn't handle external templates well. Recommended for generating reliable scientific content. Blookey game generator is a favored feature.



MagicSchool.ai

Website: <https://www.magicschool.ai>

Type: Multi-tool

Linked Resources: Images, lesson plans, slides, recommendation letters, text rewriting, feedback, newsletters

Notes: Made specifically for educators and students. Includes pre-built prompt templates. Good for fast, aligned instructional content. Great student friendly version. Limited personalization of AI output with free version. Commonly used among educators.



Mendeley

Website: <https://www.mendeley.com>

Type: Research Assistant

Linked Resources: Research

Notes: Searches and organizes academic sources based on topic. Highly recommend for finding open access research. Works well for science/social studies. Cannot access paid content.



Mirrortalk by Swival

Website: <https://mirrortalk.ai>

Type: Feedback Tool

Linked Resources: Feedback

Notes: Analyzes student video responses and confidence. Great at giving personalized feedback to students. Can integrate with Swival camera for more features.



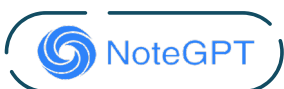
Natural Readers

Website: <https://www.naturalreaders.com>

Type: Accommodations

Linked Resources: Accommodations

Notes: Reads text aloud. Supports multiple languages. Strong support for ELL or IEP/504 students.



NoteGPT

Website: <https://notegpt.io>

Type: Study Tool

Linked Resources: Notes, flashcards, presentations

Notes: Converts videos, links, presentations, notes, and PDFs into study sets. Great resource for students with easy-to-use interface. Has an AI for math support.



Notebook LM

Website: <https://notebooklm.google>

Type: Note-Taking Tool

Linked Resources: Notes

Notes: Powered by Google. Upload content to create notes and learn. Organizes and synthesizes text sources. Great for research or project notes.



Notion

Website: <https://www.notion.com>

Type: Note-Taking Tool

Linked Resources: Notes

Notes: Great for “website look” to notes. Lots of personalization. Might be confusing for someone who struggles with technology or lower grade students.



Otter.ai

Website: <https://otter.ai>

Type: Accommodations

Linked Resources: Accommodations

Notes: Captures and transcribes speech from virtual videos. Helpful for students who need auditory notes from virtual learning platforms.



Wayground

Website: <https://wayground.com>

Type: Multi-tool

Linked Resources: Lesson plans, study tools

Notes: Free for teachers and students. Allows quiz creation and gamified review. Has a lesson plan generator.



SlideSpeak

Website: <https://slidespeak.co>

Type: Presentation Builder

Linked Resources: Slides

Notes: Clean and modern layout. Takes raw text and turns it into high quality visual slides. Favored resource.



SlidesAI.io

Website: <https://www.slidesai.io>

Type: Presentation Builder

Linked Resources: Slides

Notes: Auto-generates presentations from input text. Best for fast drafts.



Website: <https://slidesgo.com>

Type: Presentation Builder

Linked Resources: Slides

Notes: Will generate AI images on slides. Double check images generated, especially of people. Otherwise, good for themed designs.

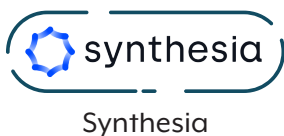


Website: <https://sora.chatgpt.com>

Type: Media Creator

Linked Resources: Videos, images

Notes: Makes short-form videos or images using GPT. Great for quick high-quality images. Daily limit applies.



Website: <https://www.synthesia.io>

Type: Media Creator

Linked Resources: Video

Notes: Avatar-style video generation. Free tier limited to 3 minutes/month.



Website: <https://chatgpt.com/g/g-P5olqoCPc-syntea>

Type: Study Tool

Linked Resources: Study tools

Notes: AI tutor that teaches through interactive games. Student-focused.



Website: <https://teachablemachine.withgoogle.com>

Type: Educational Website

Linked Resources: Coding

Notes: Students train an AI bot based on images. Great for introducing how AI works and biased data discussions.



Website: <https://tutorai.me>

Type: Study Tool

Linked Resources: Tutoring

Notes: Basic tutoring bot. Less recommended compared to others.



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